

First off, hats off to 2020 for being the best year ever! Lighting a candle* in its memory...

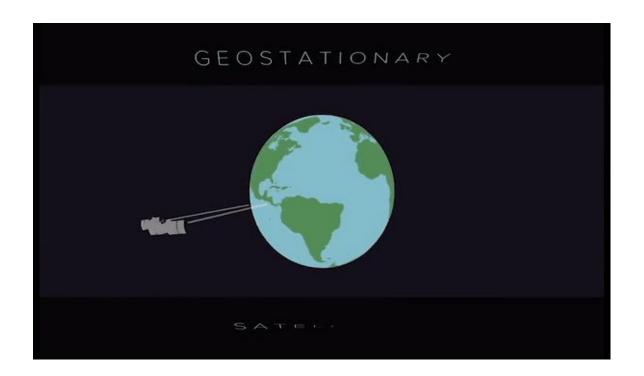


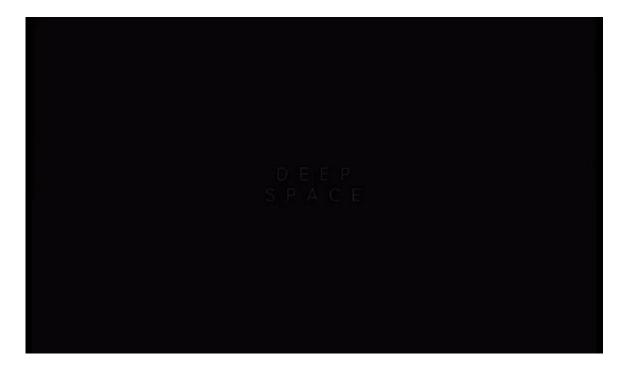
The Basics

- Types of satellite imagery we use
- Where do we get our imagery?
- Social media platforms
- Setting up for success
- Examples of top posts
- Analytics
- When things go wrong

Types of Satellite Imagery:

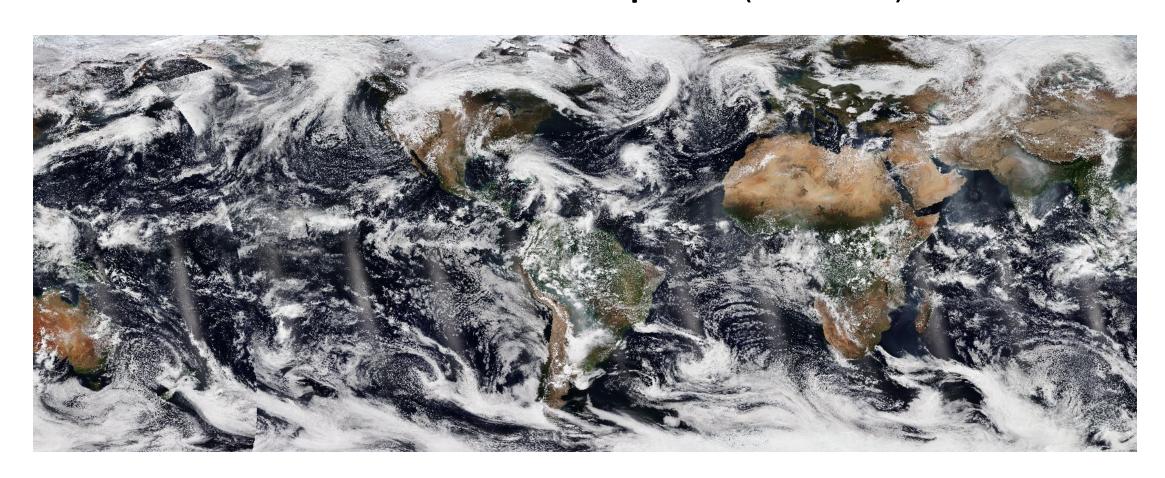
- Geostationary: shows the same area over time
- Polar orbiting: circles the Earth many times a day to get a full picture





Where Do We Get Our Imagery?

NOAA View Global Data Explorer (NOAA-20)



Where Do We Get Our Imagery?

STAR (Center for Satellite Applications and Research)



Where Do We Get Our Imagery?

SLIDER (CIRA & RAMMB)

(GOES East & GOES West + more)



And imagery specialists and meteorologists

Social Media Platforms

- Twitter
- Instagram
- Facebook
- LinkedIn

Note: Used time period of December 2019-November 2020 to get a full 12 month review of our posts.

Facebook and LinkedIn: What do we use them for?

Mostly repost platforms for our main accounts on Twitter and Instagram.

Good for reaching out to audiences that don't have either one above.

Setting up for success

In order to figure out what to post, having a solid understanding of what works—and what doesn't—is key.

Measure:

Get to know your audience

- followers
- engagement
- content analysis

Otherwise, social media performance will suffer.

Blogs/tools we use to do this: Sprout Social, Excel, Union Metrics, Twitter Analytics, Facebook Insights, Instagram Insights

Properly Size Your Imagery

Social media platforms are constantly changing their ideal image sizes and formats, so it's important to stay up to date on what size images will work best on each platform.

For our purposes, gifs are great for short imagery loops, unless it's a large file. Instagram uses mp4s.

Common programs we use to resize things:

- Photoshop
- EZgif, and other free software available online
- Snaglt

Add logo if necessary

Timing is (almost) everything - relevancy makes up the rest

Twitter and facebook

- Rely heavily on a chronological algorithm.
- Adding common terms improves visibility (e.g. "In case you missed it" and "While you were away.")
- Twitter hashtags should be kept minimal- no more than five, ideally.
- •Top performing posts tend to happen around significant events or at specific points of the day/week (think early morning, or Friday afternoon).

More hashtags do not equal more views.

Timing is (almost) everything- relevancy makes up the rest (con't)

Instagram

- Instagram is more flexible regarding timing of posts
- It focuses more on promoting posts that get more follows, likes, and hashtag performance (aka relevancy algorithm).
- · Note that with Instagram, you can use up to 30 hashtags.

The more (relevant) hashtags, the better- it definitely helps with reach

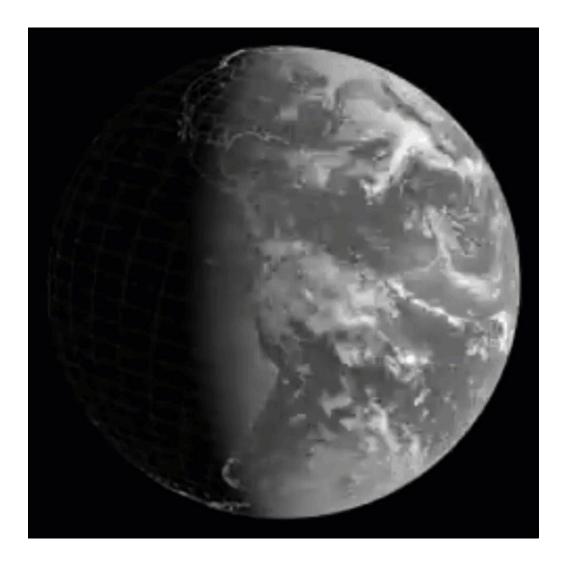
Our Top 10 Social Media Posts of 2020

Twitter: we get the most reach, with our top five posts receiving on average 809K impressions.

Instagram: we get the most consistently high likes. Our top posts this year had of reach of upwards of >57K (how many accounts reached), >18K likes, and almost 300K impressions (how often it was displayed).

Facebook and LinkedIn, as repost platforms, are negligible in comparison.

Winter Solstice (2019)



Text: Happy #WinterSolstice!
 To celebrate, we collected an image per day over the last year from #GOESEast, taken at 1200 UTC, and looped them together. You can really see how the seasons change from #equinox to #solstice due to the #Earth's 23.5° tilt.

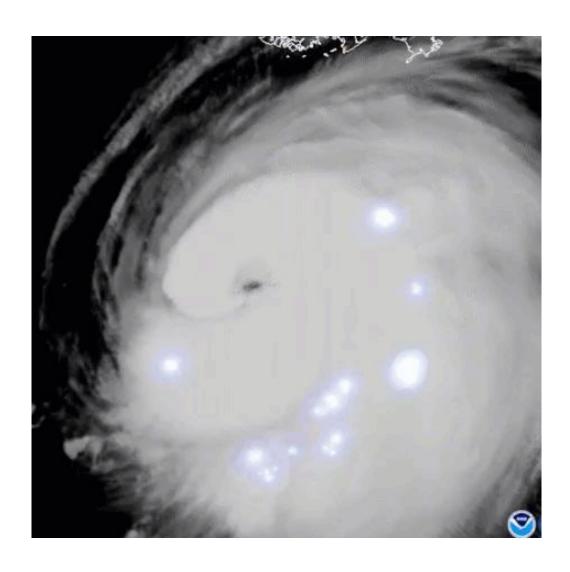
• **Likes:** 11K!!!

• Hashtag count: 5

• Links: None

• **Date/Time:** Dec. 21, 2019, 7:52 am

Laura



Text: For this #WednesdayMorning, take a look at #HurricaneLaura with @NOAA's #GOESEast satellite as the hurricane's convection bursts with lightning. As of 8 a.m. EDT, #Laura had winds of 115 mph and was rapidly intensifying in the Gulf of Mexico.

Latest: nhc.noaa.gov

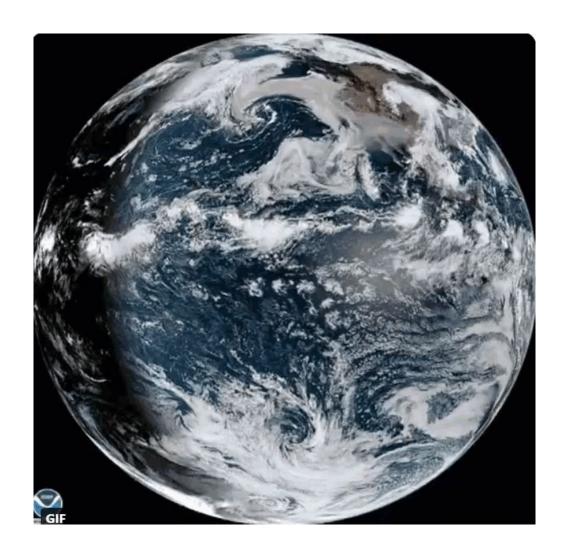
• **Likes:** 4.4 K

• Links: 1

Hashtag count: 4

• **Date/Time:** Aug. 26, 8:09 am

California Wildfires



Text: This #FullDiskFriday, the #GOESWest satellite is continuing to watch the sobering amount of smoke from wildfires spreading across the #WestCoast of the U.S.
 @NIFC_Fire says there are 102 large wildfires and so far, more than 4 million acres have burned.

• Likes: 4K

• Hashtag count: 3

• Links: none

• Date: September 11, 3:26 pm

Earthrise



Text: Like the famous "Earthrise" photo taken from the #moon, this image, captured by @NOAA's #GOESWest on March 6, 2020, shows the moon rising over the Earth. Can you see it? We hope you feel as lucky as we do to see this beautiful image on #FullDiskFriday and #FlashbackFriday!

• **Likes:** 3.3 K

• Hashtag count: 4

• Links: none

• **Date/Time:** Aug. 14, 3:19 pm

Popocatépetl eruption



Text: #GOESEast recorded the #eruption of #Mexico's #Popocatépetl #volcano this morning (which spewed an #AshCloud ~20,000 feet into the air) via its #GeoColor band. It also detected #SulfurDioxide in the #plume, as shown in the second SO2 composite.

More: http://go.usa.gov/xpScB

• Likes: 2 K

• Hashtag count: 9

• Links: one

• **Date/Time:** Jan. 9, 2020 at 11:57 am

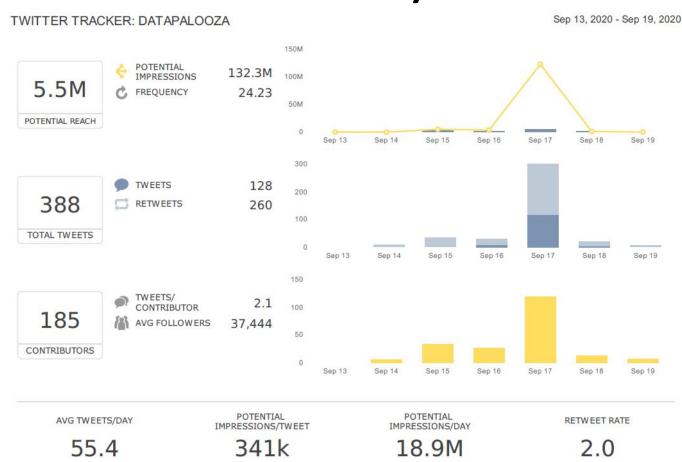
Analytics-Learn what your audience likes!

• What kinds of devices do they use? Consider this before adding links to non-mobile-friendly pages.

What kinds of things are they interested in? Tie that in with hashtags.

• For us, people love animations the most, especially on Instagram (and Twitter, too!)

Sample Twitter Analytics



APRIL 2020 Tweet Record

	Time	# of Hashtags	Impressions	Engagements	Engagement Rate
o #WhereInTheWorld					
phy skills: https://t.	2020-04-01 16:17 +0000	3	23768	822	3.46%
Television Infrared Observation t successful weather #satellite. K pictures during its 78-day arn more: https://t. sx	2020-04-01 17:11 +0000	1	60804	1045	1.72%
weather satellite, #TIROS1 was looks at the value and Isatellites and the game- story. https://t.co/AgKIqlYG4M	2020-04-01 18:17 +0000	4	58910	476	0.81%
nich are great for rqdbP	2020-04-01 19:34 +0000	1	13667	42	0.31%
itellite viewed these beautiful fornia. These tend to form when such as #mountains, causing the os://t.co/z4M8fxXv8f	2020-04-02 11:59 +0000	4	20092	266	1.32%
ent freely available through June ely-available resources you J	2020-04-02 14:01 +0000	0	17980	72	0.40%
west, warm winds in the re system off the northeastern y is dynamic and fascinatingtime: https://t.co/ymEELYxPIt	2020-04-02 17:04 +0000	3	22101	255	1.15%

Tip: Always keep an eye on your stats, because they can help you figure out how to make good tweets even better.

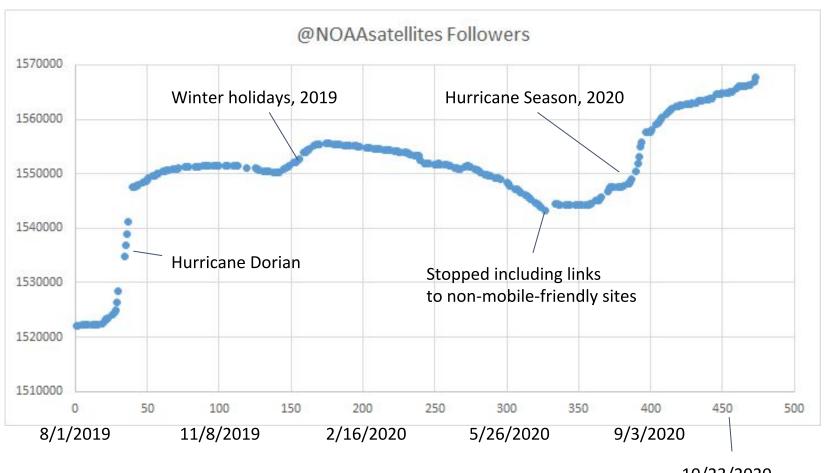
When Things Go Wrong

Earlier this year, we saw that we were losing a steady number of followers on Twitter and couldn't figure out why.

We created a chart to analyze tweet content, considering timing, content, and tweet length for a limited timeframe (Jan-May 2020)

We realized that some of the links we were posting were not mobile-friendly. We stopped posting those kinds of links, and the numbers started increasing again.

When Things Go Wrong (cont')



10/23/2020

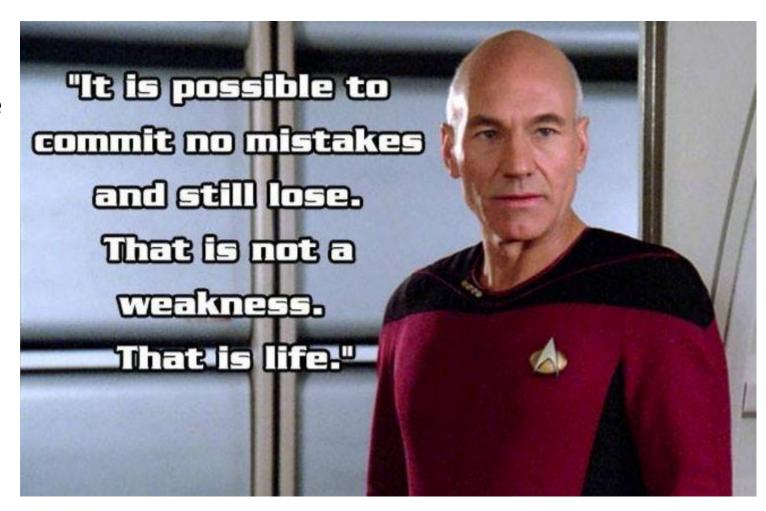
Day 1 = Aug. 1, 2019 Day 470 = Nov. 21, 2020 Hurricane Season 2019: (Day 31 - 122) Hurricane Season 2020: (Day 336 - 486)

When Things Go Wrong (cont')

Lessons learned: be very careful before making major changes to the structure of your posts/copy. If you want to experiment, know that can affect your engagement rates.

Sometimes you can do everything right on a post, but still not have it do well. Don't take it personally!

Remember Sharpiegate (dun dun dunn)



How can we do even better? Some ways we increased engagement

Include fresh and timely information

Make posts interactive

- Quizzes/polls (e.g. #WhereInTheWorld Wednesday)
- Ask a question (e.g. #DidYouKnow ...?)

Include regular posts that people come to expect

- Every Wednesday quizzes
- #TimelapseTuesday
- #FullDiskFriday

Tailor posts to what your audience likes

- Historical posts
 - Historic vs. modern satellite imagery
 - This Day in History
- Interesting facts
- Image of the Day descriptions

Word things differently on different platforms

Post strategically

- Post when you know your audience is active
- Change up time zones so content covers a wide range

Use a link shortener

Look up popular hashtags and terminology

Make sure all links are mobile-friendly

Instagram Link Tree

Thank you! Any Questions?

lyric.prince@noaa.gov, sara.leeds@noaa.gov

Silvy



Gracie



Watson

